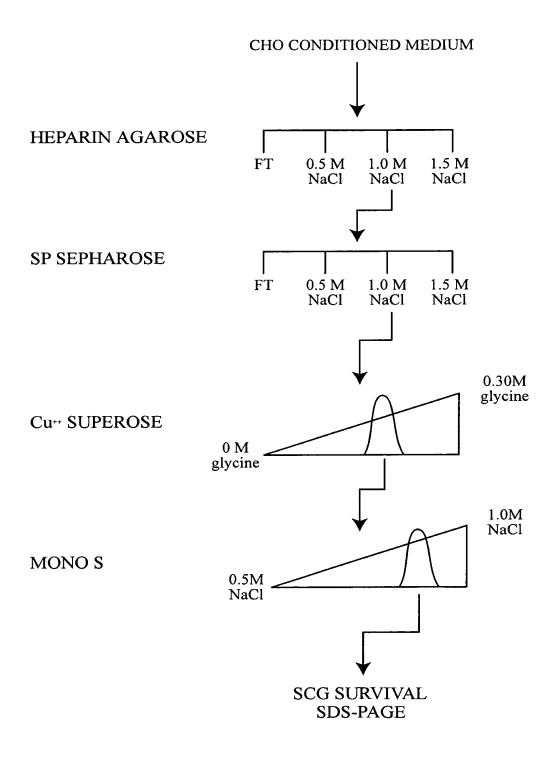


Title: Neurturin and Related Growth Factors

Inventor(s): Johnson et al.

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Docket # 56029-2669



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Figure 1

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fraction: ML 21 22 23 24 25 26 27 28 29 30 31 32



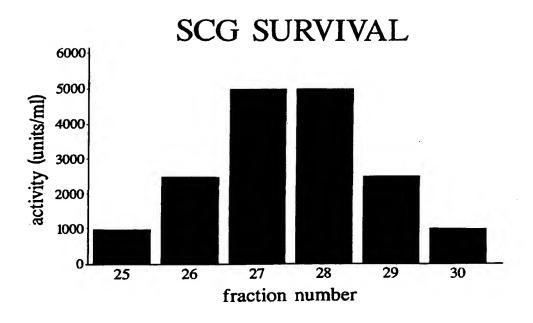


Figure 2

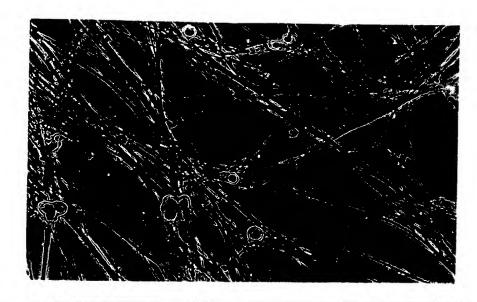
Neurturin and Related Growth Factors

Johnson et al.

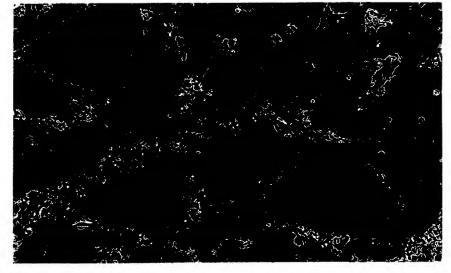
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A) NGF



B) Anti-NGF



C) Anti-NGF + Neurturin

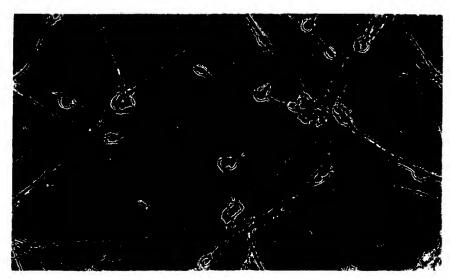


Figure 3

Neurturin and Related Growth Factors Title: Johnson et al. Inventor(s):

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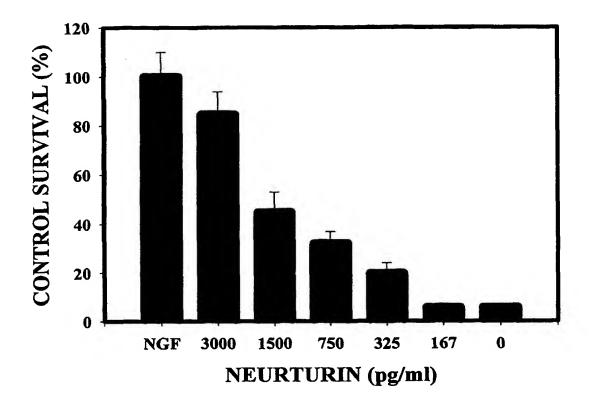


Figure 4

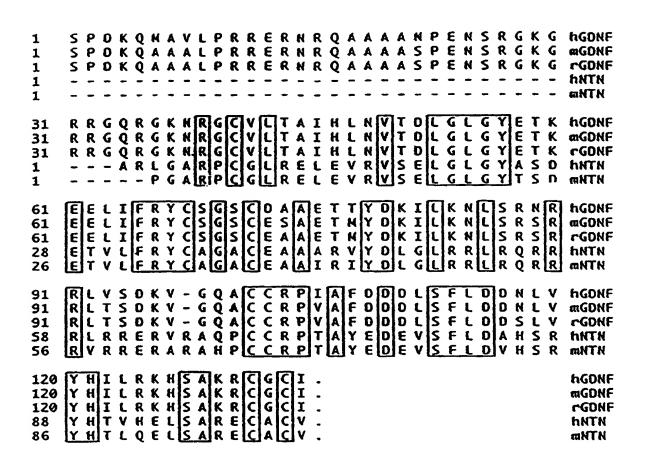
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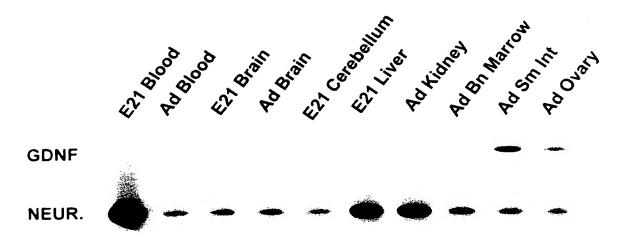


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Neurturin and Related Growth Factors

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ATGCAGCGCTGGAAGGCGGCGCCTTGGCCTCAGTGCTCTGCAGCTCCGTGCTGCATC 60 Met Gin Ang Trp Lys Ala Ala Ala Leu Ala Ser Val Leu Cys Ser Ser Val Leu Ser Ile TGGATGTCGAGAGGGCCTGCTTCTCAGCCACCGCCTCGGACCTGCGCTGGTCCCCCTG 120 Trp Met Cys Arg Glu Gly Leu Leu Leu Ser His Arg Leu Gly Pro Ala Leu Val Pro Leu CACCGCCTGCCTCGAACCCTGGACGCCCGGATTGCCCGCCTGGCCCAGTACCGTGCACTC 180 His Arg Leu Pro Arg Thr Leu Asp Ala Arg Ile Ala Arg Leu Ala Gin Tyr Arg Ala Leu CTGCAGGGGCCCCGGATGCGATGGAGCTGCGCGAGCTGACGCCCTGGGCTGGGCGGCCC 240 Leu Gln Gly Ala Pro Asp Ala Met Glu Leu Arg Glu Leu Thr Pro Trp Ala Gly Arg Pro Pro Gly Pro Ang Ang Ala Gly Pro Ang Ang Ang Ala Ang Ala Ang Leu Gly Ala CGGCCTTGCGGGCTGCGCGAGCTGGAGGTGCGCGAGCTGGGCCTGGGCTACGCG 360 Arg Pro Cys Gly Lieu Arg Glu Leu Glu Val Arg Val Ser Glu Leu Gly Leu Gly Tyr Ala Ser Asp Glu Thr Val Leu Phe Arg Tyr Cys Ala Gly Ala Cys Glu Ala Ala Ala Arg Val TACGACCTCGGGCTGCGACGACTGCGCCAGCGGCGCGCCCTGCGGCGGGAGCGGGTGCGC 480 Tyr Asp Leu Gly Leu Arg Arg Leu Arg Gln Arg Arg Arg Leu Arg Arg Glu Arg Vol Arg Ala Glin Pro Cys Cys Ang Pro Thr Ala Tyr Glu Asp Glu Val Ser Phe Leu Asp Ala His AGCCGCTACCACACGGTGCACGAGCTGTCGGCGCGCGAGTGCGCCTGCGTGTGA 594 Ser Arg Tyr His Thr Val His Glu Leu Ser Ala Arg Glu Cys Ala Cys Val

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Neurturin and Related Growth Factors Johnson et al. Title:

Inventor(s):

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350	TGTGGGCTGCGCGAGCTCGAGCTGAGCGAGCTGGGCCTA
400	CACGTCGGATGAGACCGTGCTGTTCCGCTACTGCGCAGGCGCGTGCGAGG
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550	CTATGAGGACGAGGTGTCCTTCCTGGACGTGCACAGCCGCTACCACACGC
600	TGCAAGAGCTGTCGGCGCGGGAGTGCGCGTGCGTGATGCTACCTCACG
650	CCCCCGACCTGCGAAAGGGCCCTCCCTGCCGACCCTCGCTGAGAACTGA
675	CTTCACATAAAGTGTGGGAACTCCC

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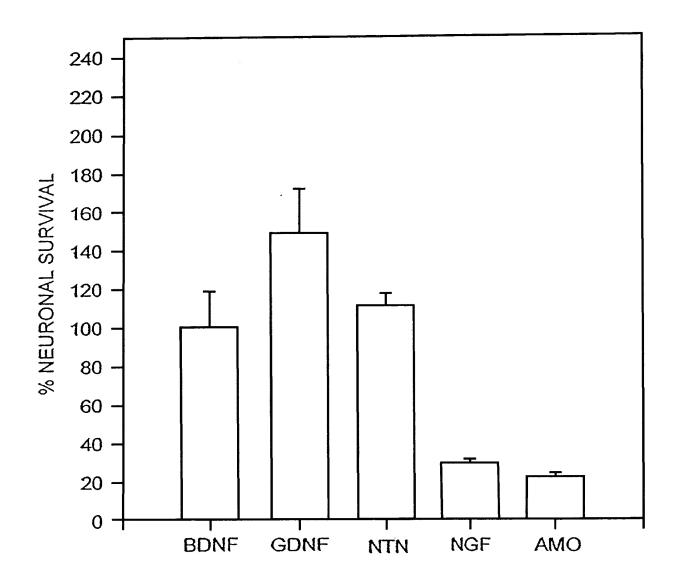


Figure 10

Title: Neurturin and Related Growth Factors
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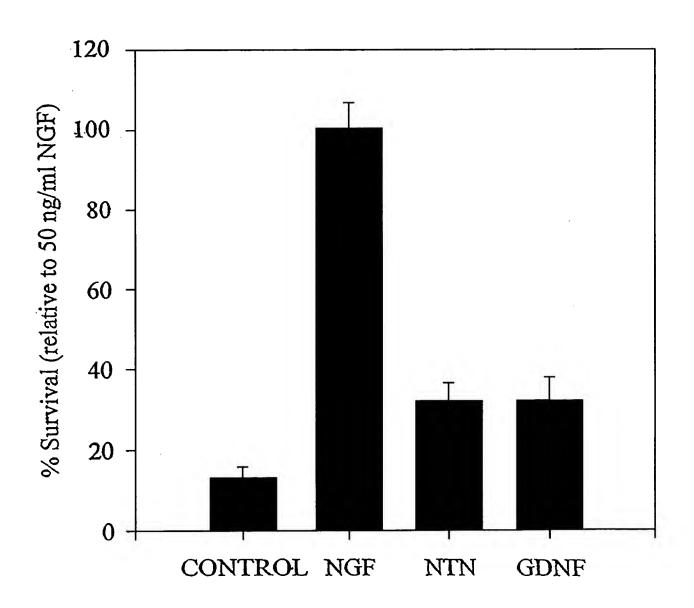


Figure 11

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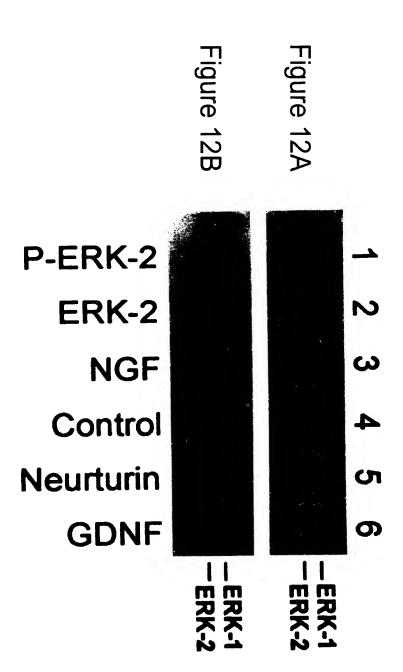
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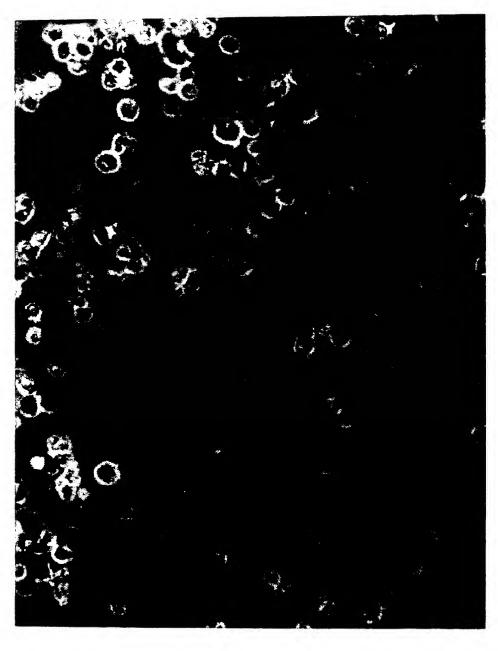
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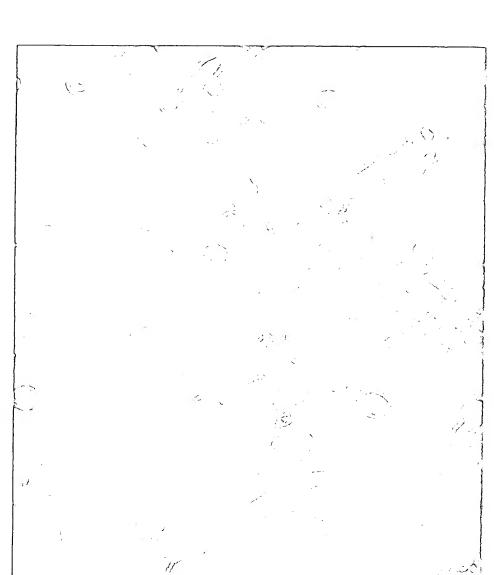


Figure 13B. Neurturin-treated

Title:

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MAPK Response in Neuroblastoma Cell Lines

Figure 14A

SK-NSH Neuroblastoma (naive)

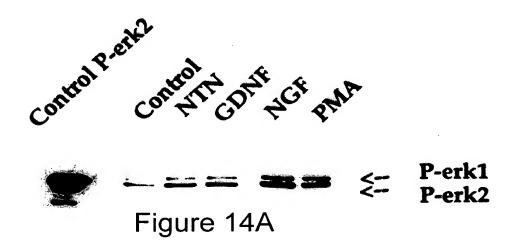


Figure 14B NGP Neuroblastoma (RA tx)

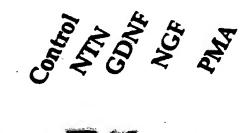


Figure 14C SY5Y Neuroblastoma (RX tx)





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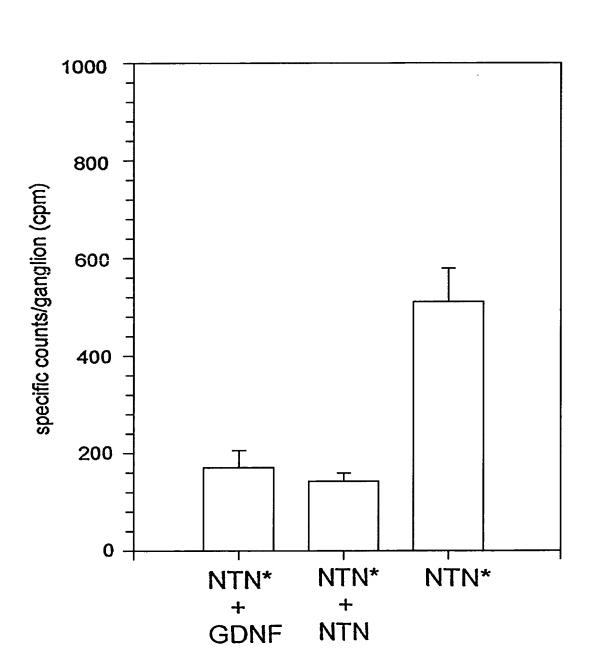


Figure 15

Title: Inventor(s): Appln. No.	Neurturin and Related Growth Factors Johnson et al. 09/476,290 - <u>Replacement Sheet</u>							
Docket #	56029-2669 17 / 19							
150 152 153 154 156	1135 1135 1136 1136 1146 1146 1146 1146 1146 1146	SEQ						
GDF1 GDF3 DORSLN INHA INHA MIS GDF9 GDNF GDNF	TGFS1 TGFS3 TGFS3 INHSA	GROWTH FACTOR						
CHRHOLFINEQ DIGMEKMVIAPKGEMANYCHGECPEMTTYINSSSGEPALMEMAVEMA-ADLECCY - PARLSEISVLYEDDRAVVILR-QYELMYVDECGCK CHRHOLFINEQ DIGMEKMVIAPKGEMANYCHGECPEMTTYINSSNYAPMOALMEMADP-KVPKANCY PTKLASISILYKDDAGVPTLIR-HYEDMYVDECGCG CHRHOLFINEY-DIGMEKMVIAPKGEMANYCHGGCFEPLITONVTET	CCURQLYIDFREDLGWK-WIHERKGYHANFCLGGCPYLWSLDTQHSKYLSLYNTINDEASAS-PCCVPQALEPLPIVYYVGRKPKVEQLSMNIVKSCKCS CCLRPLYIDFREDLGWK-WIHERKGYHANFCLGGCPYLRSADTQHSKYLSLYNTINPEASAS-PCCVSQDLEPLTILYYYGRKPKIEQLSMNIVKSCKCS CCKQFFVSFK-DIGWNDWIIAPSGYHANYCEGGCPSHIAG-TSGSSLSFHSTVLHYNTINPEASAS-PCCVPQDLEPLTILYYVGRTPKVEQLSMNIVKSCKCS CCKQFFVSFK-DIGWNDWIIAPSGYHANYCEGGCPSHIAG-TSGSSLSFHSTVINHYRWRGHJFPANLKSCCVPTKLSPWSMLYFDDEXNIV-KXDIQMIIVEECGCS CCKQFFVSFK-DIGWNDWIIAPSGYHANYCEGGCPSHIAG-TPGAASSFHTAVVNQYRWRGHJF-GTVNSCCIPTKLSPWSMLYFDDEXNIV-KXDIQMIVEECGCS CCKQFFVSFK-DIGWNDWIIAPSGYAAYCHGECPPPLADHLNST	SEQUENCE						

Figure 16

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107	105	104	102	101	100	98	97	96	94	93	92	91	9 (89))	87	Φ	NO:
GDF9 NTN	INHQ	DORSLN	GDF1	VGI	BMP3	BMP8	BMP7	BMP6	440	BMP4	BMP2	NODAL	TNHAR	INHEA	TGF83	TGFS2	TGF\$1	GROWTH FACTOR
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Neurturin and Related Growth Factors

Johnson et al.

Title:

Neurturin and Related Growth Factors Title:

Johnson et al. Inventor(s):

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SEQ ID NO:	GROWTH FACTOR	SEQUENCE
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115	NODAL	CCAPVKTKPLSMLYVDNGRVLLEHHKDMIVEECGCL
116	BMP2	CCVPTELSAISMLYLDENEKVVLK-NYQDMVVEGCGCR
117	BMP4	CCVPTELSAISMLYLDEYDKVVLK-NYQEMVVEGCGCR
118	DPP	CCVPTQLDSVAMLYLNDQSTVVLK-NYQEMTVVGCGCR
119	BMP5	CCAPTKLNAISVLYFDDSSNVILK-KYRNMVVRSCGCH
120	BMP6	CCAPTKLNAISVLYFDDNSNVILK-KYRNMVVRACGCH
121	BMP7	CCAPTQLNAISVLYFDDSSNVILK-KYRNMVVRACGCH
122	BMP8	CCAPTKLSATSVLYYDSSNNVILR-KHRNMVVKACGCH
123	60A	CCAPTRLGALPVLYHLNDENVNLK-KYRNMIVKSCGCH
124	BMP3	CCVPEKMSSLSILFFDENKNVVLKV-YPNMTVESCACR
125	VG1	CCVPTKMSPISMLFYDNNDNVVLR-HYENMAVDECGCR
126	GDF1	CCVPARLSPISVLFFDNSDNVVLR-QYEDMVVDECGCR
127	GDF3	VCVPTKLSPISMLYQDSDKNVILR-HYEDMVVDECGCG
128	DORSLN	CCVPTKLDAISILYKDDAGVPTLIYNYEGMKVAECGCR
129	INHa	CCAALPGTMRPLHVRTTSDGGYSFKYETVPNLLTQHCACI
130	MIS	CCVPTAYTGKLLISLSEERISAHHVPNMVATECGCR
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133	NTN	CCRPTAYE-DEVSFLDAHSRYHTVHELSARECACV

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